



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/965,525

09/26/2001

Alejandro Schwartzman

CISCP236/114748

3761

22434

7590

06/23/2009

Weaver Austin Villeneuve & Sampson LLP

P.O. BOX 70250

OAKLAND, CA 94612-0250

EXAMINER

BAIG, SAHAR A

ART UNIT

PAPER NUMBER

2424

MAIL DATE

DELIVERY MODE

06/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/965,525	Applicant(s) SCHWARTZMAN ET AL.	
	Examiner SAHAR A. BAIG	Art Unit 2424	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 04/07/2009 have been fully considered but they are not persuasive. On Page 6 of the Remarks section, Applicant argues that "Jost only appears to configuring a controller "typically located at a central head-end facility" to control a new set-top terminal. There is not operating system configured to "operate the replacement component" and "report power characteristics to the upstream device." In Jost, the set-top terminal is the device that is new. No component within the set-top terminal is new or replaced. There is no operating system configured to operate any new component or report power characteristics to the upstream device. Examiner respectfully disagrees. In Jost, the problem being solved is that of a newly purchased or replaced set top terminal, added to the system which must be properly configured to work within the system of the cable system operator. Jost is being used to teach only the limitation that it is well known in the art to operate a replacement component [set top terminal] and report power characteristics [automatic registration] to the upstream device [Col. 5 lines 50-57]. Therefore previous rejection will be maintained.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 18-26 rejected under 35 U.S.C. 101 because claiming of a computer software product is not patentable.

Art Unit: 2424

Claim(s) 18-26 is/are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 18 is drawn to functional descriptive material recorded on a computer software product.. Normally, the claim would be statutory. However, the specification, at page 16-78 defines the claimed computer readable medium as encompassing statutory media such as a "ROM", "hard drive", "optical drive", etc, as well as ***non-statutory*** subject mater such as a "signal", carrier wave, and airwaves.

A "signal" embodying functional descriptive material is neither a process nor a product (i.e., a tangible "thing") and therefore does not fall within one of the four statutory classes of § 101. Rather, "signal" is a form of energy, in the absence of any physical structure or tangible material.

Because the full scope of the claim as properly read in light of the disclosure encompasses non-statutory subject matter, the claim as a whole is non-statutory. The examiner suggests amending the claim to include the disclosed tangible computer readable media, while at the same time excluding the intangible media such as signals, carrier waves, airwaves, etc. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2424

3. Claim 1-4, 6, 9-12, 14, 17-21, 23, 26, 33-35, 37, 39, and 40 rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al., U.S. Patent Application Publication No. 2002/0141544 in view of Stetson et al., U.S. Patent No. 6,552,614, in further view of Jost et al. U.S. Patent No. 7,251,820.

Regarding claim 1, Brown discloses a method (fig.3) for an operating system (executed by controller 60, fig. 1, [0021]) to operate a system component, the operating system configurable to drive a plurality of system components ([0015]), the method comprising: identifying a component (e.g., upstream transmitter formed of 35, 85, 87 of fig. 1; [0017]); obtaining parameter information comprising power characteristics of the component from nonvolatile memory (fig.3, item 205, [0022]; nonvolatile memory, [0016]); and characterizing the component using the parameter information (fig.3, items 215, 216; [0023]), wherein the characterization allows the operating system to operate the component ([0027]) and report power characteristics to an upstream device (fig.3, item 225; [0022], [0019]). However Brown fails to explicitly describe the memory as nonvolatile, in an analogous art, Stetson discloses a cable modem comprising a non volatile memory (Col. 6 line 33-38). Therefore it would have been obvious to one of ordinary skill in the art to implement the use of non-volatile memory is the method of Brown to enable improved cable modem performance. The combined methods of Brown and Stetson fail to teach configuring of the operating system to operate the replacement component, in an analogous art Jost discloses a controller

Art Unit: 2424

capable of automatically configuring set-top terminals purchased through a retail outlet and installed by consumers. **[Figure 2 Col. 5 lines 50-60]**. Therefore it would have been obvious to one of ordinary skill in the art to combine the teachings of Brown, Stetson, and Jost to allow cable modem component interchangeability.

As to claim 2, Brown discloses the method of claim 1, wherein the operating system is a cable modem operating system (e.g., [0014]).

As to claim 3, Brown discloses the method of claim 2, wherein that the component is a tuner (i.e., upstream transmitter formed of 35, 85, 87 of fig. 1; [0015], [0017]).

As to claim 4, Brown discloses the method of claim 3, wherein operating the component comprises varying RF transmission power ([0017]).

As to claim 6, Brown discloses the method of claim 3, wherein parameter information comprises band crossover frequency information ([0016]).

As to claim 9, Brown discloses the method of claim 3, wherein parameter information comprises component address information (setting control registers of components, [0015], [0016]).

Regarding claims 10-12, 14, and 17, Brown discloses a system (fig. 1) comprising means for performing the corresponding method steps discussed above with respect to claims 1-4, 6, and 9.

Regarding claims 18-21, 23, and 26, Brown further discloses computer code ([0021]) for performing the corresponding method steps discussed above with respect to claims 1-4, 6, and 9.

Regarding claim 33, Brown discloses a cable modem comprising a tuner and nonvolatile memory as discussed above with respect to the method steps of claims 1-3.

As to claim 34, Brown discloses the apparatus of claim 33, wherein the nonvolatile memory is flash memory ([0016]).

As to claim 35, Brown discloses the apparatus of claim 34, wherein the tuner is a cable modem RF tuner ([0016]).

As to claims 37, 39, and 40, see the rejections of claims 4, 6, and 9, above.

Art Unit: 2424

4. Claims 5, 7, 8, 36, and 38 rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al., U.S. Patent Application Publication No. 2002/0141544 in view of Stetson et al., U.S. Patent No. 6,552,614, in further view of Jost et al. U.S. Patent No. 7,251,820, in further view of Lapid, U.S. Patent No. 6,687,489.

Regarding claims 5, 7, 8, 36, and 38, the combined teachings of Brown, Stetson and Jost discloses the methods and apparatus of claims 3, 11, 20, and 35, but fails to disclose parameter information comprising IF output information, IF AGC Gain Threshold information, or RF AGC Gain Threshold information. However, in an analogous art, Lapid discloses such parameters (e.g., IF/RF TOP and AGC response parameters) may be used for temperature compensation in a cable modem tuner (col. 4, 11. 1-51). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the parameter information of Brown, Stetson, and Jost to include the IF/RF TOP and AGC response parameters taught by Lapid, thereby enabling improved the cable modem tuner performance.

5. Claims 27-32 rejected under 35 U.S.C. 103(a) as being unpatentable over Stetson et al., U.S. Patent No. 6,552,614, in view of Miller et al. U.S. Patent Application Publication No. 2003/0046690.

Art Unit: 2424

Regarding claims 27 and 30, Stetson discloses a cable modem (fig. 2, 100) (and corresponding method) comprising: a tuner (fig. 2, items 112, 122, 114, 116); a non-volatile memory (fig.2, item 128) operable to provide power characteristics associated with the tuner to a cable modem operating system (col. 3, line. 54-59, col. 1, line 31-35), wherein the cable modem operating system uses (accounts for) the power characteristics to drive the tuner to transmit at a desired power level (col. 6, line. 7-26). Although Stetson fails to disclose replacement tuners, such a limitation is well known in the art and is taught by Miller. Miller discloses a CMTS system operable to replace components [switching tuners 0046].

Therefore it would have been obvious to one of ordinary skill in the art to combine the teachings of Stetson and Miller to allow cable modem component interchangeability.

As to claims 28 and 31, Stetson discloses the cable modem and corresponding method of claims 27 and 30, wherein the nonvolatile memory is flash memory (col. 6, line15-20).

As to claims 29 and 32, Stetson discloses the cable modem and corresponding method of claims 28 and 31, wherein the tuner is a cable modem RF tuner (col. 4, line.5-20).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAHAR A. BAIG whose telephone number is (571)270-3005. The examiner can normally be reached on 4/5/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SB

/Joseph G Ustaris/
Primary Examiner, Art Unit 2424